

Attorney Docket No.: 10084.000-US

PATENT

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DE  
10/25/02

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Chris Pernell

Confirmation No: 8839

Serial No.: 09/636,453

Group Art Unit: 1761

Filed: August 11, 2000

Examiner: Wong, L

For: Whey Protein Emulsion

**Declaration of Sabry Madkor**

Commissioner for Patents  
Washington, DC 20231

Sir:

I, Sabry Madkor, the undersigned, declare and state the following:

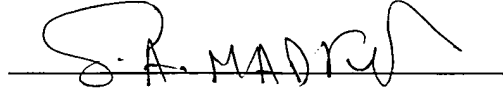
I. I am an Egyptian citizen and presently employed as a Senior Scientist for Novozymes North America, Inc. I hold a ph.D degree from Minia University. I have extensive experience in the field of cheese production. A copy of my *curriculum vitae* is attached to my declaration.

II. I am familiar with the patent application and its official record, including the Examples 1 and 2 of the patent application. I have also reviewed GB 2234236 to Richard James Marshall.

III. The improvements obtained by the use of the hydrolyzed whey protein as compared to unhydrolyzed whey protein are superior and surprising as compared to the use of unhydrolyzed whey protein. As shown in Example 2 of the patent application, the use of both hydrolyzed whey and unhydrolyzed whey proteins in accordance with the methods claimed in the present invention resulted in a cheese product with an improved whey protein content and with a sufficient moisture content. However, the use of the hydrolyzed whey protein as compared to the unhydrolyzed whey protein was better in terms of the meltability of the cheese, an important property of cheese. In particular, unlike the use of the unhydrolyzed whey protein, the use of the hydrolyzed whey protein improves or maintains meltability quality of the cheese, whereas the use of the unhydrolyzed whey protein reduced the meltability quality of the cheese. The improvement obtained in meltability by the use of the hydrolyzed whey protein as compared to unhydrolyzed whey protein is commercially valuable.

VII. I, hereby, declare that all statements made herein of his own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize any patent issuing thereon.

Signed this 11 day of october, 2002

  
Sabry Madkor

C.V.

**SABRY A. MADKOR, Ph.D.**

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**CURRENT POSITION:** Senior Scientist, Applied Discovery R & D , Novozymes North America, Inc, PO Box 576, Franklinton, NC 27525, USA

**EDUCATION**

**Ph. D.**, 1985, in Dairy Technology & Microbiology, Minia University

**M. Sc.**, 1980, in Dairy Chemistry & Technology, Minia University.

**B. Sc. (Hon's)**, 1975, Food Science ( minor Dairying) , Alexandria University

**PROFESSIONAL HISTORY**

**2000-present:** Senior Scientist (project leader) at Novozymes North America Inc, Franklinton, NC. Responsible for conducting, guiding and supervising research projects related to enzyme application in Food technology, Dairy ingredient, Food functionality and nutritional receipes.

**1996-2000:** Senior Research Scientist (visiting professor) at Dairy Products Technology Center, California Polytechnic State University. Conduct and supervise research projects on selection of lactic cultures to improve cheese, dairy food quality and food microbiology.

**1991-95:**

- Associate Professor at the Department of Dairy Technology, Minia University. Supervised M. Sc. and Ph. D. students. Principal investigator of several research topics on dairy technology, chemistry and microbiology.
- Visiting Research Scientist at California Polytechnic State Univ., from June to December 1993. Conducted a research project on the contribution of culture enzymes to flavor development in cheese .

**1989-1990:** Post doctorate fellowship, Department of Food Chemistry, UCC, Ireland. Conducted research projects on use of enzyme blends in acceleration of cheese ripening or enzyme-modified cheese, heat gelation of recombined concentrated milk powders.

**1986-89:** Assistant professor of Dairy Technology supervised M.Sc. and Ph.D. post-graduate students. Taught several advanced courses related to dairy technology, microbiology and sensory evaluation of foods. Research activities on cheese ripening, dairy microbiology and cultured dairy products.

**1981-85:** Ph. D. post-graduate candidate at Department of Food Chemistry, University College, Cork, and Ireland. Designed and conducted thesis research project on microbiology and ripening of blue cheeses under supervision of Prof. P. F. Fox. Demonstrated laboratory food analysis courses for graduate student at UCC, Ireland.